- 25 -

What is claimed is:

1.   A system for processing at least one signal representative of an event detected by at least one detector in a flow cytometer, the system comprising:

a sampling device, adapted to receive portions of said signal from said detector in time sequence and to generate a respective value representative of the respective magnitude of each respective portion of said signal as said respective portion of said signal is being received; and

a storage device, adapted to store said values generated by said sampling device.

2.   A system as claimed in claim 1, wherein:

said sampling device receives a number of said portions totaling substantially all of said signal, and generates said values which represent said portions of substantially all of said signal.

3.   A system as claimed in claim 1, wherein:

said signal is an analog signal representative of a light signal emitted from said event as detected by said detector.

4.   A system as claimed in claim 1, further comprising:

an arithmetic device, adapted to arithmetically combine a designated value with each of said values.

5.   A system as claimed in claim 4, wherein:

said arithmetic device includes a subtractor which is adapted to subtract said designated value from each of said values.

6.   A system as claimed in claim 4, wherein:

said designated value is representative of an undesired signal detected by said detector.

7.   A system as claimed in claim 4, wherein:

said designated value is representative of a characteristic of said detector.

8.   A system as claimed in claim 1, wherein:

said sampling device is adapted to receive portions of a second said signal from a second said detector in time sequence and to generate a respective second value representative of the respective magnitude of each respective portion of said second signal as said respective portion of said second signal is being received; and

said storage device is adapted to store said second values generated by said sampling device.

9.   A system as claimed in claim 8, wherein:

said sampling device receives said portions of said signal at a time different from that during which said sampling device receives at least some of said portions of said second signal.

10.   A system as claimed in claim 9, further comprising:

a comparator, adapted to compare each of said second values with a respective one of said first values to compare said signal to said second signal.

11.   A system for identifying a configuration of a detector unit of a flow cytometer, the system comprising:

a port, adapted to couple to a removable device, said removable device including an optical element and a memory adapted to store information pertaining to said optical element; and

a reader, adapted to read said information stored in said memory when said removable device is coupled to said port.

12.   A system as claimed in claim 11, wherein:

said optical element includes an optical filter.

13.   A system as claimed in claim 11, wherein:

said optical element includes a mirror.

14.   A system as claimed in claim 11, further comprising:

an indicator, adapted to provide an indication of said information read by said reader.

15.   A removable device, adapted for coupling with a port of a flow cytometer, the removable device comprising:

an optical element; and

a memory adapted to store information pertaining to said optical element.

16.   A removable device as claimed in claim 15, wherein:

said optical element includes an optical filter.

17.   A removable device as claimed in claim 15, wherein:

said optical element includes a mirror.

18.   A method for processing at least one signal representative of an event detected by at least one detector in a flow cytometer, the method comprising:

receiving portions of said signal from said detector in time sequence;

generating a respective value representative of the respective magnitude of each respective portion of said signal as said respective portion of said signal is being received; and

storing said values.

19.   A method as claimed in claim 18, wherein:

said receiving receives a number of said portions totaling substantially all of said signal; and

said generating generates said values which represent said portions of substantially all of said signal.

20.   A method as claimed in claim 18, wherein:

said signal is an analog signal representative of a light signal emitted from said event as detected by said detector.

21.   A method as claimed in claim 18, further comprising:

arithmetically combining a designated value with each of said values.

22.   A method as claimed in claim 21, wherein:

said arithmetic combining includes subtracting said designated value from each of said values.

23.   A method as claimed in claim 21, wherein:

said designated value is representative of an undesired signal detected by said detector.

24.   A method as claimed in claim 21, wherein:

said designated value is representative of a characteristic of said detector.

25.   A method as claimed in claim 18, further comprising:

receiving portions of a second said signal from a second said detector in time sequence;

generating a respective second value representative of the respective magnitude of each respective portion of said second signal as said respective portion of said second signal is being received; and

storing said second values.

26. A method as claimed in claim 25, wherein:

said receiving steps are performed such that said portions of said signal are received at a time different from that during which at least some of said portions of said second signal are received.

27. A method as claimed in claim 26, further comprising:

comparing each of said second values with a respective one of said first values to compare said signal to said second signal.

28. A method for identifying a configuration of a detector unit of a flow cytometer, comprising:

coupling a removable device to a port of said flow cytometer, said removable device including an optical element and a memory adapted to store information pertaining to said optical element; and

reading said information stored in said memory when said removable device is coupled to said port.

29. A method as claimed in claim 28, wherein:

said optical element includes an optical filter.

30. A method as claimed in claim 28, wherein:

said optical element includes a mirror.

31. A method as claimed in claim 28, further comprising:

providing an indication of said information read from said memory.

32. A method for manufacturing a removable device, adapted for coupling with a port of a flow cytometer, the method comprising:

coupling an optical element to said removable device; and

including a memory in said removable device, said memory being adapted to store information pertaining to said optical element.

33.   A method as claimed in claim 32, wherein:
said optical element includes an optical filter.

34.   A method as claimed in claim 32, wherein:
said optical element includes a mirror.

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